GUVI Assignment: Car Rental System
By Prashant

Here are sample inputs for testing the Car and User APIs:

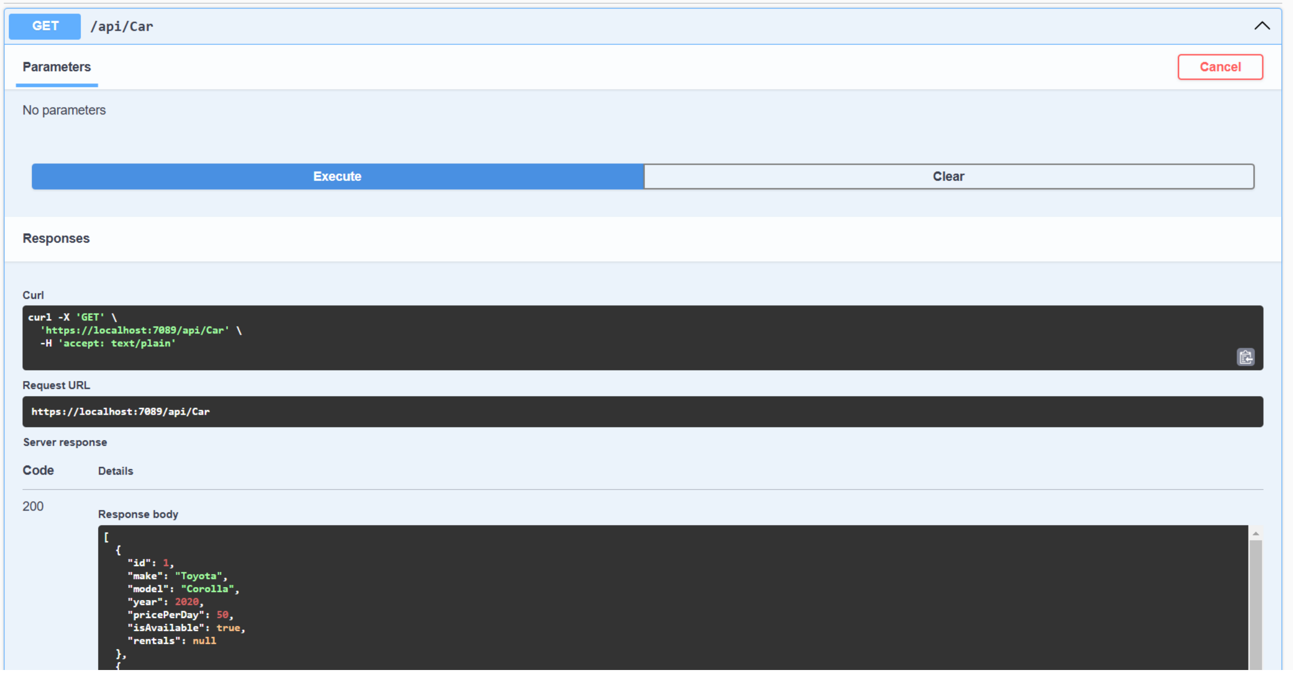
Car API

1. GET /api/car: https://localhost:7089/api/Car

- **Purpose**: Fetch all available cars.
- **Sample Input**: No input required.
- **Expected Output**:

```
[
  {
    "id": 1,
    "make": "Toyota",
    "model": "Corolla",
    "year": 2020,
    "pricePerDay": 50,
    "isAvailable": true
  },
  {
    "id": 2,
    "make": "Ford",
    "model": "Focus",
    "year": 2019,
    "pricePerDay": 45,
    "isAvailable": true
  }
]
```

Swagger UI SS:



```
curl -X 'GET' \
  'https://localhost:7089/api/Car' \
  -H 'accept: text/plain'
```

```
https://localhost:7089/api/Car
```

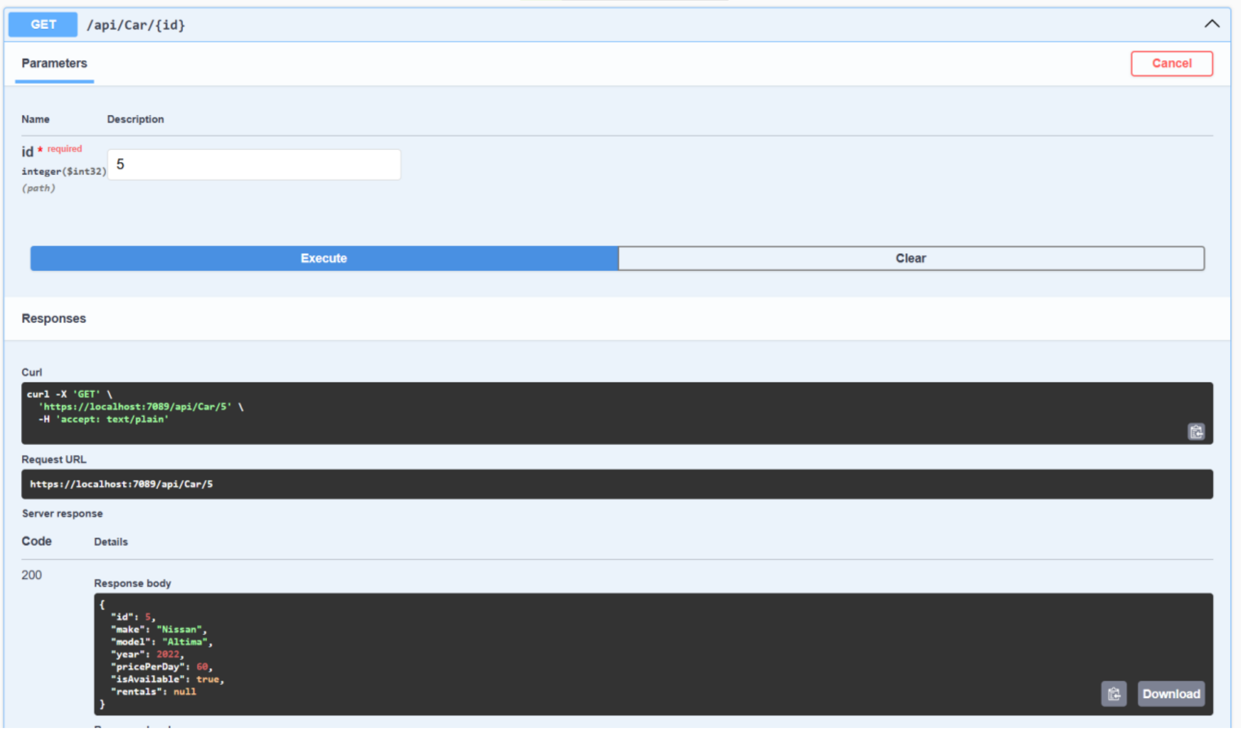
```
[
  {
    "id": 1,
    "make": "Toyota",
    "model": "Corolla",
    "year": 2020,
    "pricePerDay": 50,
    "isAvailable": true,
    "rentals": null
  },
  {
```

2. GET /api/car/{id}

- **Purpose**: Fetch a specific car by ID.
- **Sample Input**: GET /api/car/5
- **Output**:

```
{
  "id": 1,
  "make": "Toyota",
  "model": "Corolla",
  "year": 2020,
  "pricePerDay": 50,
  "isAvailable": true
}
```

Swagger UI SS: https://localhost:7089/api/Car/5



id * required
integer($int32)
(path)
5

Curl

```
curl -X 'GET' \
  'https://localhost:7089/api/Car/5' \
  -H 'accept: text/plain'
```

Request URL

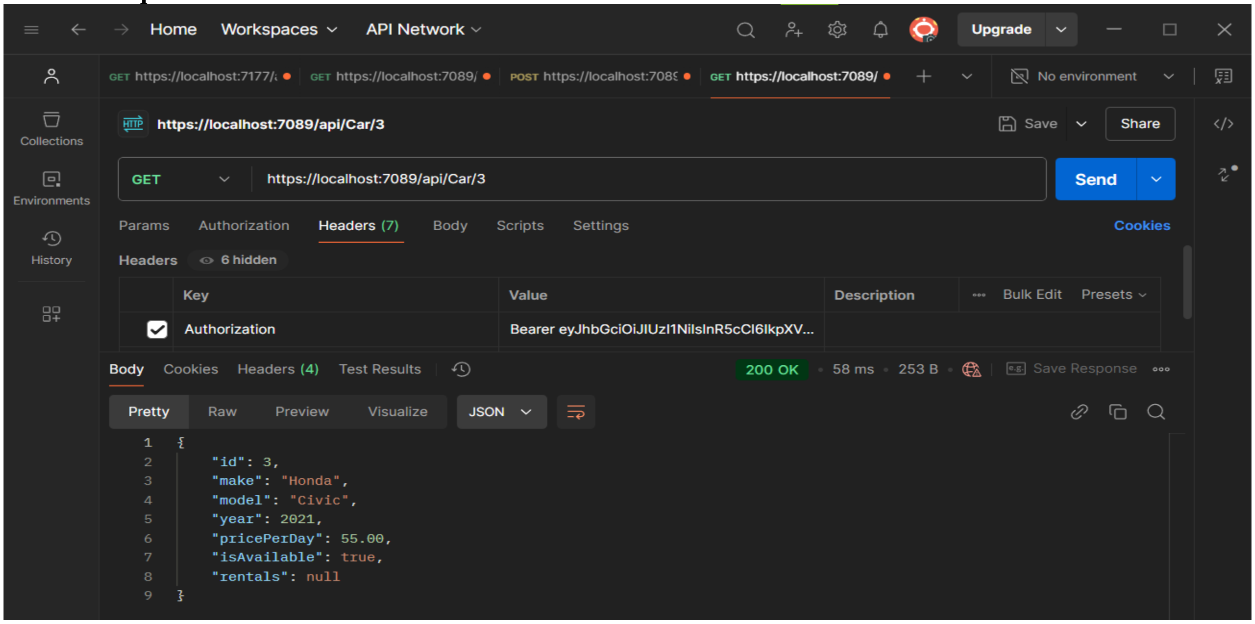
```
https://localhost:7089/api/Car/5
```

Server response

Code	Details
200	Response body

```
{
  "id": 5,
  "make": "Nissan",
  "model": "Altima",
  "year": 2022,
  "pricePerDay": 60,
  "isAvailable": true,
  "rentals": null
}
```

Postman request:



https://localhost:7089/api/Car/3

GET https://localhost:7089/api/Car/3

Headers 6 hidden

	Key	Value	Description
☑	Authorization	Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXV...	

200 OK 58 ms 253 B

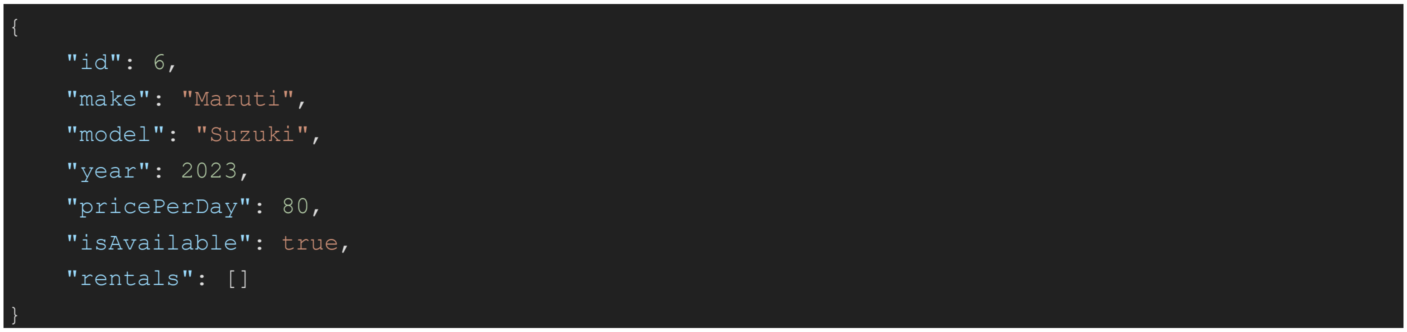
```
{
    "id": 3,
    "make": "Honda",
    "model": "Civic",
    "year": 2021,
    "pricePerDay": 55.00,
    "isAvailable": true,
    "rentals": null
}
```

3. POST /api/car

- **Purpose**: Add a new car (Admin-only endpoint).
- **Sample Input**:

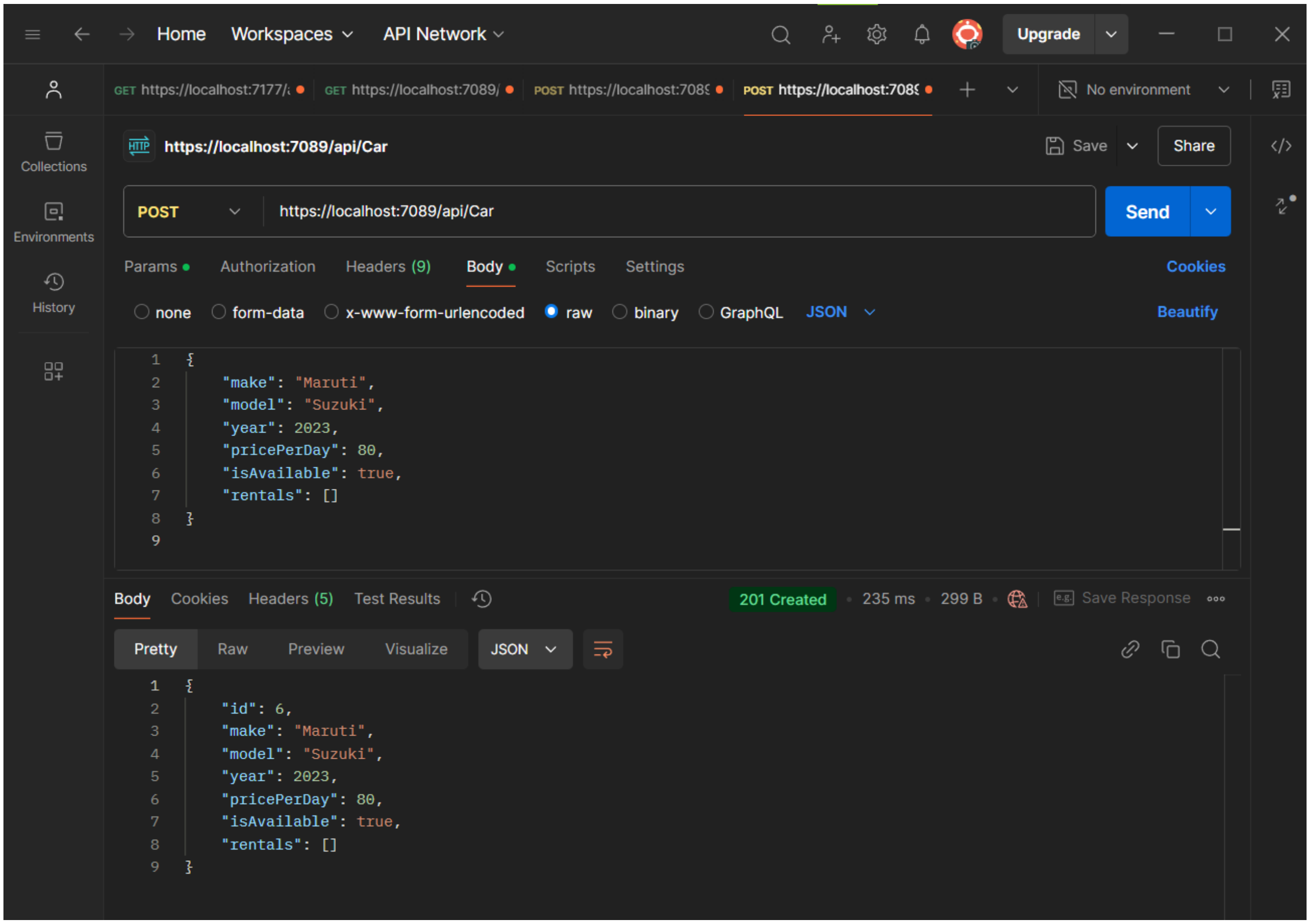
```
{
   "make": "Maruti",
   "model": "Suzuki",
   "year": 2023,
   "pricePerDay": 80,
   "isAvailable": true,
   "rentals": []
}
```

- **Output**:



```
{
    "id": 6,
    "make": "Maruti",
    "model": "Suzuki",
    "year": 2023,
    "pricePerDay": 80,
    "isAvailable": true,
    "rentals": []
}
```

Postman SS:



https://localhost:7089/api/Car

POST https://localhost:7089/api/Car

○ none ○ form-data ○ x-www-form-urlencoded ● raw ○ binary ○ GraphQL JSON

```
{
    "make": "Maruti",
    "model": "Suzuki",
    "year": 2023,
    "pricePerDay": 80,
    "isAvailable": true,
    "rentals": []
}
```

Body — 201 Created · 235 ms · 299 B — JSON

```
{
    "id": 6,
    "make": "Maruti",
    "model": "Suzuki",
    "year": 2023,
    "pricePerDay": 80,
    "isAvailable": true,
    "rentals": []
}
```

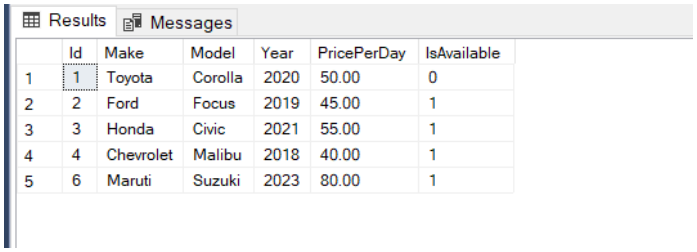
4. PUT /api/car/{id}

- **Purpose**: Update a car's details (Admin-only endpoint).
- **Sample Input**: PUT /api/car/1

```
{
  "id": 1,
  "make": "Toyota",
  "model": "Corolla",
  "year": 2021,
  "pricePerDay": 55,
  "isAvailable": true
  "rentals": []
}
```

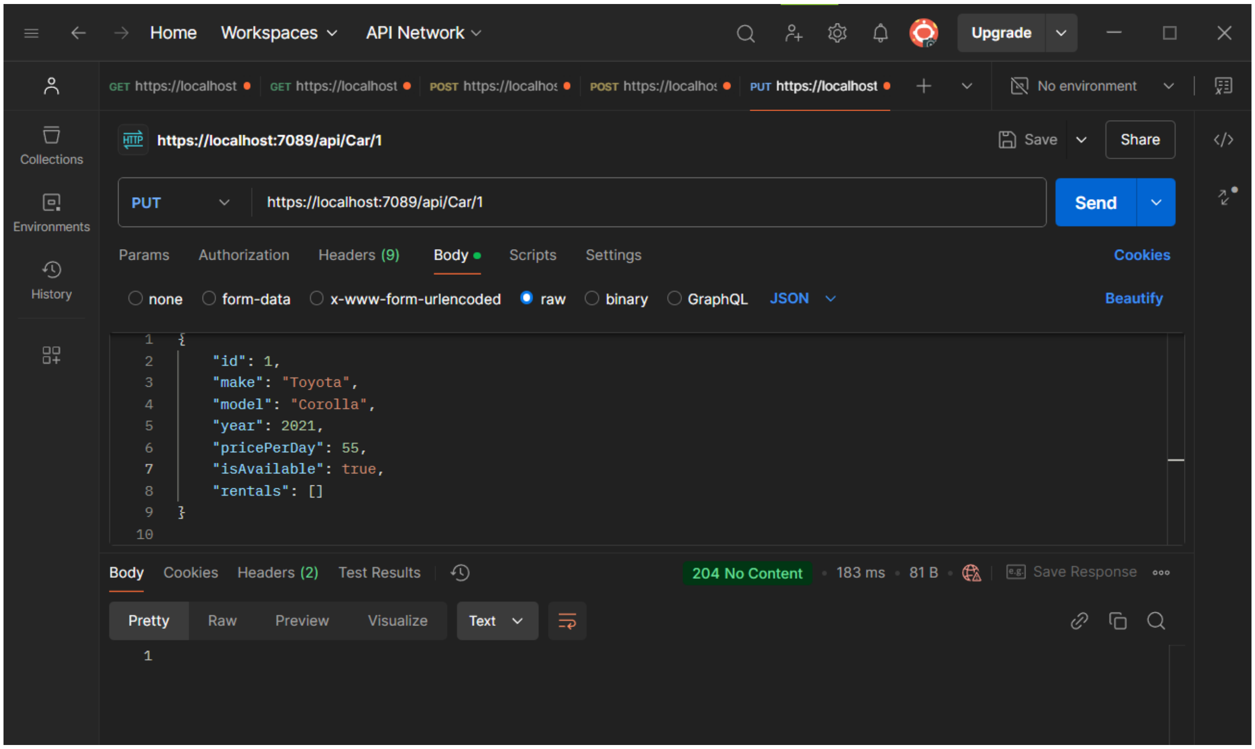
- **Output**: 204 No Content

SSMS before update:


Results
Messages

	Id	Make	Model	Year	PricePerDay	IsAvailable
1	1	Toyota	Corolla	2020	50.00	0
2	2	Ford	Focus	2019	45.00	1
3	3	Honda	Civic	2021	55.00	1
4	4	Chevrolet	Malibu	2018	40.00	1
5	6	Maruti	Suzuki	2023	80.00	1

Updating year and rate in Postman with Admin token:



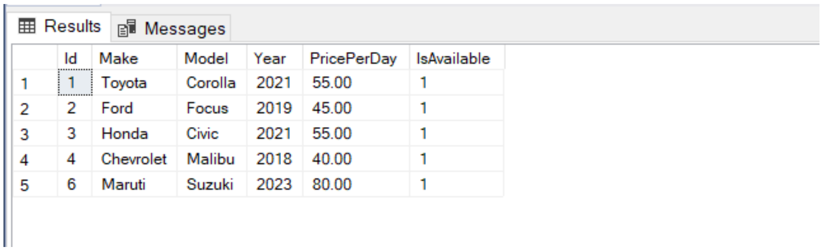
https://localhost:7089/api/Car/1

PUT https://localhost:7089/api/Car/1

```
{
    "id": 1,
    "make": "Toyota",
    "model": "Corolla",
    "year": 2021,
    "pricePerDay": 55,
    "isAvailable": true,
    "rentals": []
}
```

204 No Content · 183 ms · 81 B

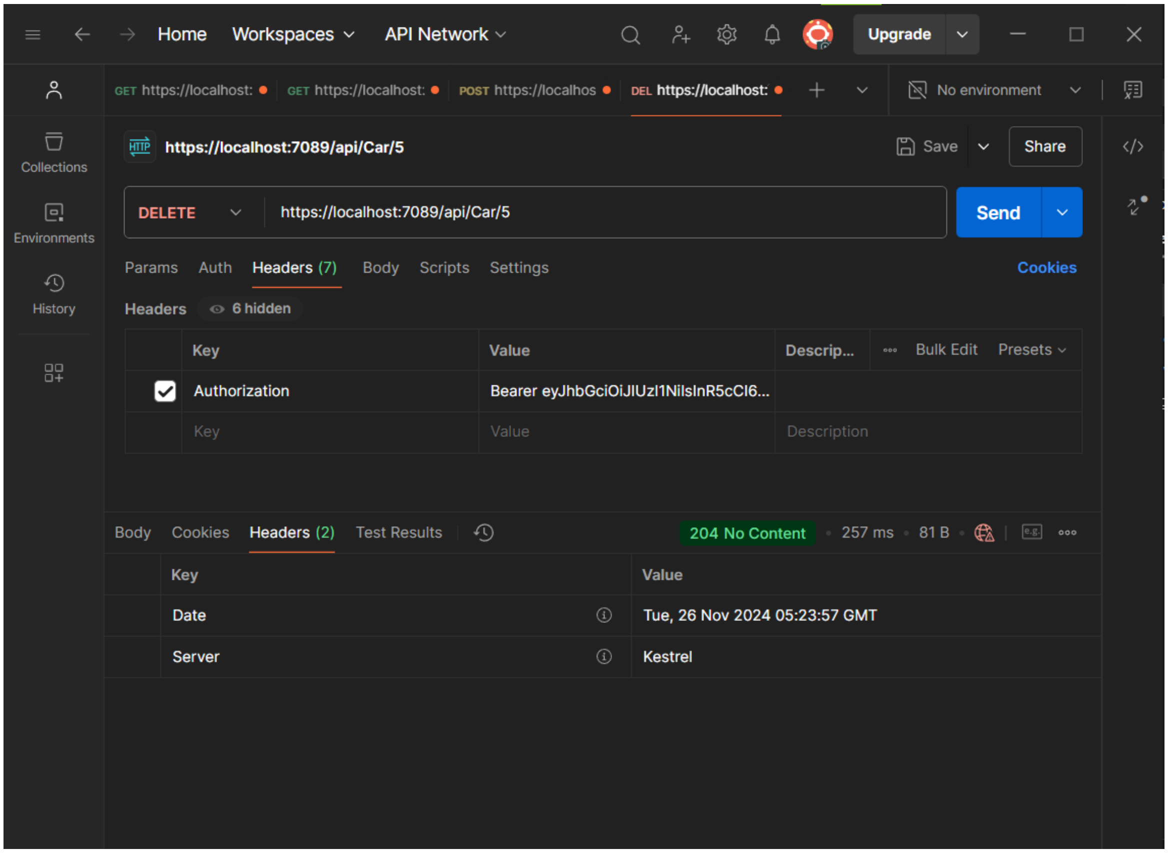
After updating:



	Id	Make	Model	Year	PricePerDay	IsAvailable
1	1	Toyota	Corolla	2021	55.00	1
2	2	Ford	Focus	2019	45.00	1
3	3	Honda	Civic	2021	55.00	1
4	4	Chevrolet	Malibu	2018	40.00	1
5	6	Maruti	Suzuki	2023	80.00	1

5. DELETE /api/car/{id}

- **Purpose**: Delete a car (Admin-only endpoint).
- **Sample Input**: DELETE /api/car/5
- **Output**: (using admin login token)



https://localhost:7089/api/Car/5

DELETE https://localhost:7089/api/Car/5

	Key	Value	Descrip...
☑	Authorization	Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6...	

204 No Content · 257 ms · 81 B

Key	Value
Date	Tue, 26 Nov 2024 05:23:57 GMT
Server	Kestrel

6. POST /api/car/rent

- **Purpose**: Rent a car (User endpoint).
- **Sample Input**:

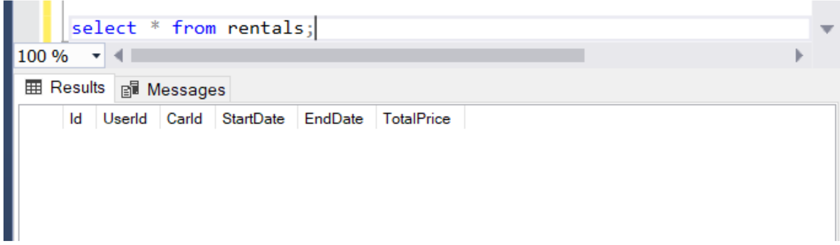
```
{
   "carId": 1,
   "startDate": "2024-11-25T00:00:00",
   "endDate": "2024-11-30T00:00:00"
}
```

With auth JWT token in the header

- **Output (**https://localhost:7089/api/Car/rent?carId=1&startDate=2024-11-27T10:00:00Z&endDate=2024-11-30T10:00:00Z**):**

"Car rented successfully for userId 1"

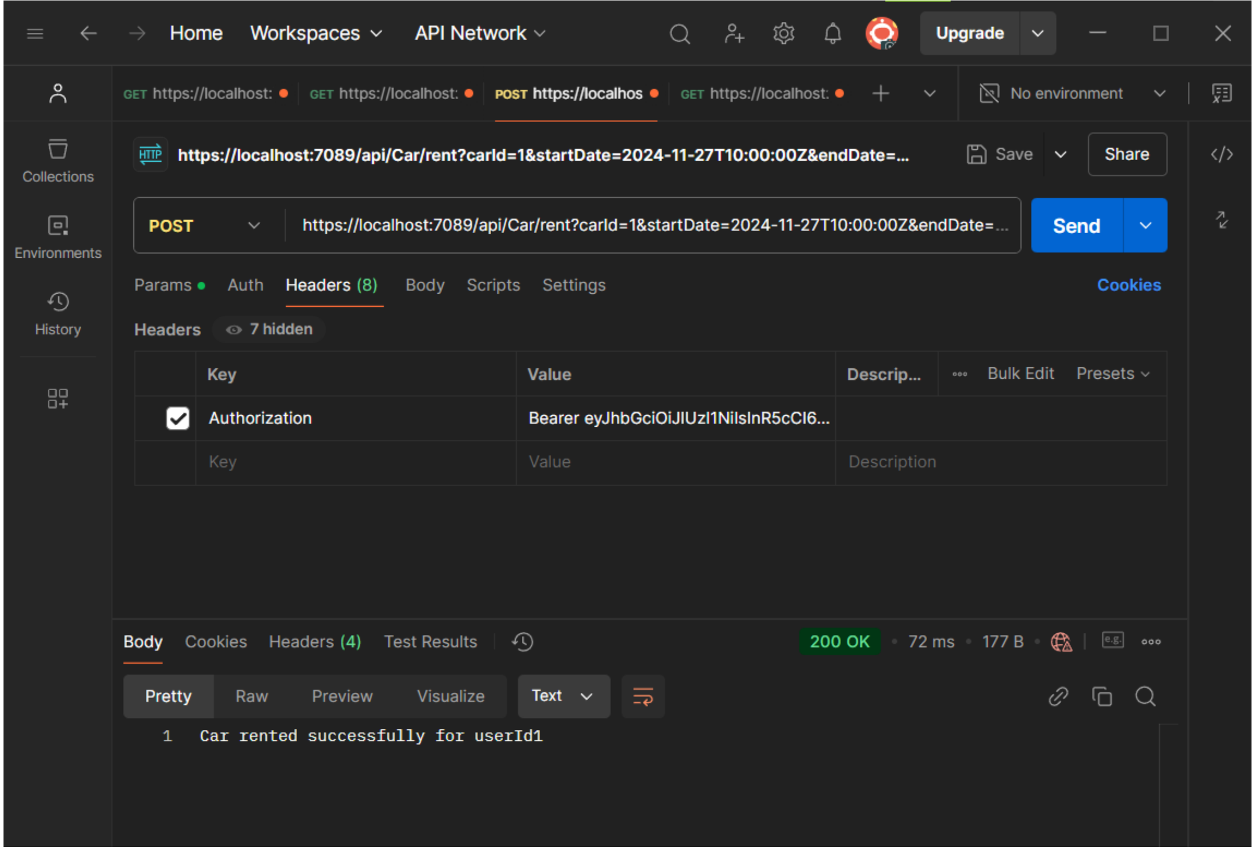
Before sending post request:



```
select * from rentals;
```

Id	UserId	CarId	StartDate	EndDate	TotalPrice

After post request



POST https://localhost:7089/api/Car/rent?carId=1&startDate=2024-11-27T10:00:00Z&endDate=...

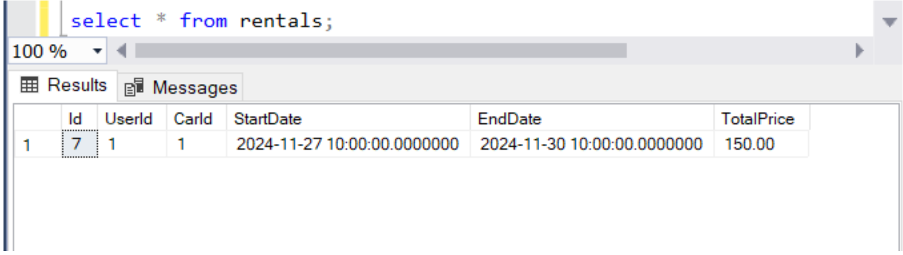
Headers (8)

Key	Value	Descrip...
☑ Authorization	Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6...	

200 OK · 72 ms · 177 B

```
Car rented successfully for userId1
```

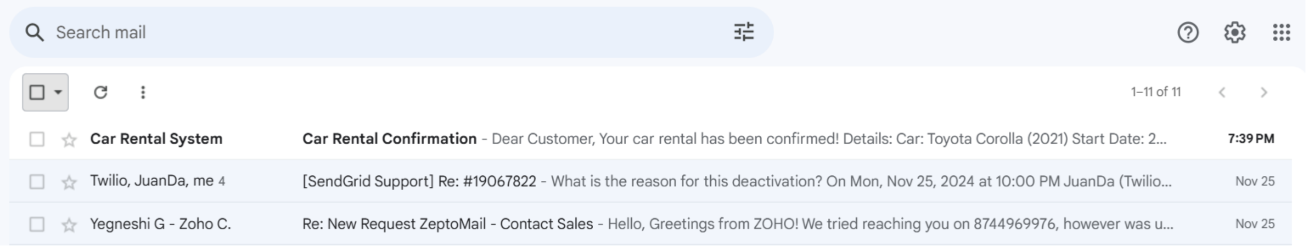
After sending post request:



```
select * from rentals;
```

	Id	UserId	CarId	StartDate	EndDate	TotalPrice
1	7	1	1	2024-11-27 10:00:00.0000000	2024-11-30 10:00:00.0000000	150.00

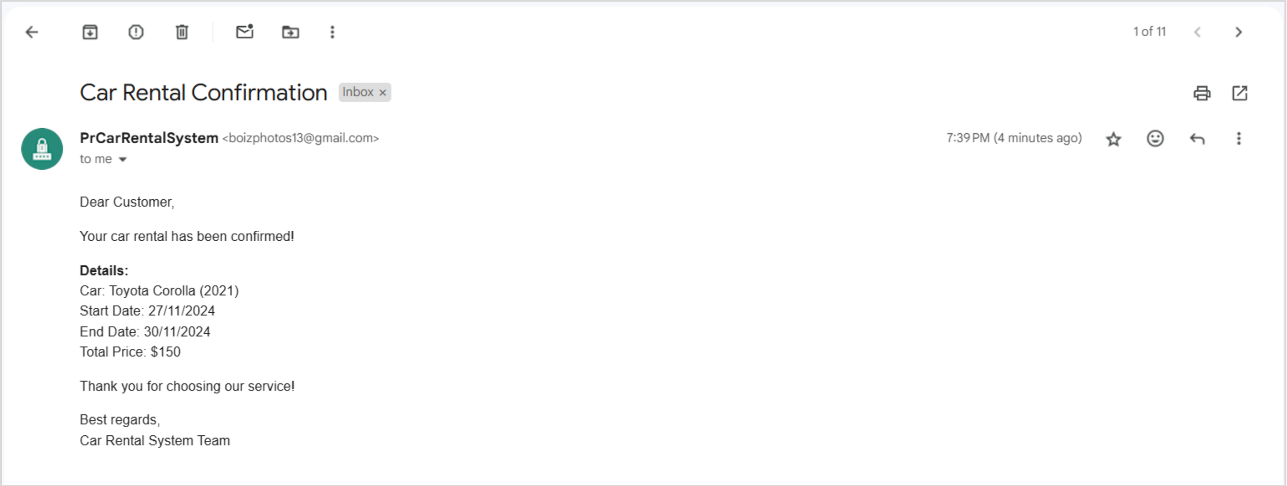
Email sent using GSMTP:
Email sent successfully: 250 2.0.0 OK 1732630194 d9443c01a7336-2129dbf9791sm84769175ad.145 – gsmtp



Car Rental System — **Car Rental Confirmation** - Dear Customer, Your car rental has been confirmed! Details: Car: Toyota Corolla (2021) Start Date: 2... — 7:39 PM

Twilio, JuanDa, me 4 — [SendGrid Support] Re: #19067822 - What is the reason for this deactivation? On Mon, Nov 25, 2024 at 10:00 PM JuanDa (Twilio... — Nov 25

Yegneshi G - Zoho C. — Re: New Request ZeptoMail - Contact Sales - Hello, Greetings from ZOHO! We tried reaching you on 8744969976, however was u... — Nov 25



Car Rental Confirmation

PrCarRentalSystem <boizphotos13@gmail.com>
to me
7:39 PM (4 minutes ago)

Dear Customer,

Your car rental has been confirmed!

Details:
Car: Toyota Corolla (2021)
Start Date: 27/11/2024
End Date: 30/11/2024
Total Price: $150

Thank you for choosing our service!

Best regards,
Car Rental System Team

User API

1. POST /api/user/register

- **Purpose**: Register a new user.
- **User role Input**:

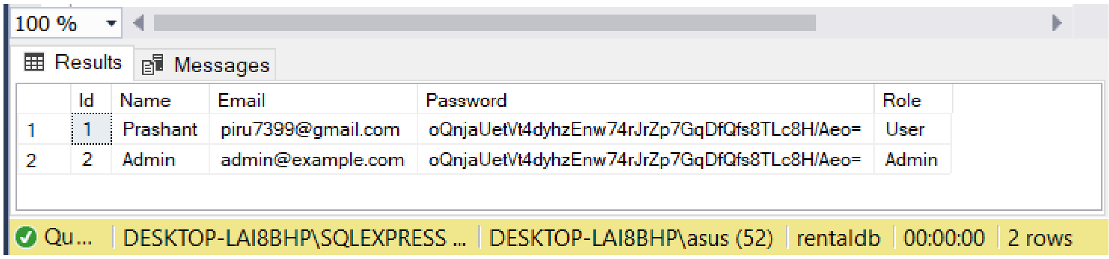
```
{
  "name": "Prashant",
  "email": "piru7399@gmail.com",
  "password": "Password123!",
  "role": "User",
  "rentals": []
}

{
  "name": "Admin",
  "email": "admin@example.com",
  "password": "Password123!",
  "role": "Admin",
  "rentals": []
}
```

- **Output**:

```
{
 "id": 1,
 "name": "Prashant",
 "email": "piru7399@gmail.com",
 "password": "oQnjaUetVt4dyhzEnw74rJrZp7GqDfQfs8TLc8H/Aeo=",
 "role": "User",
 "rentals": []
}
```

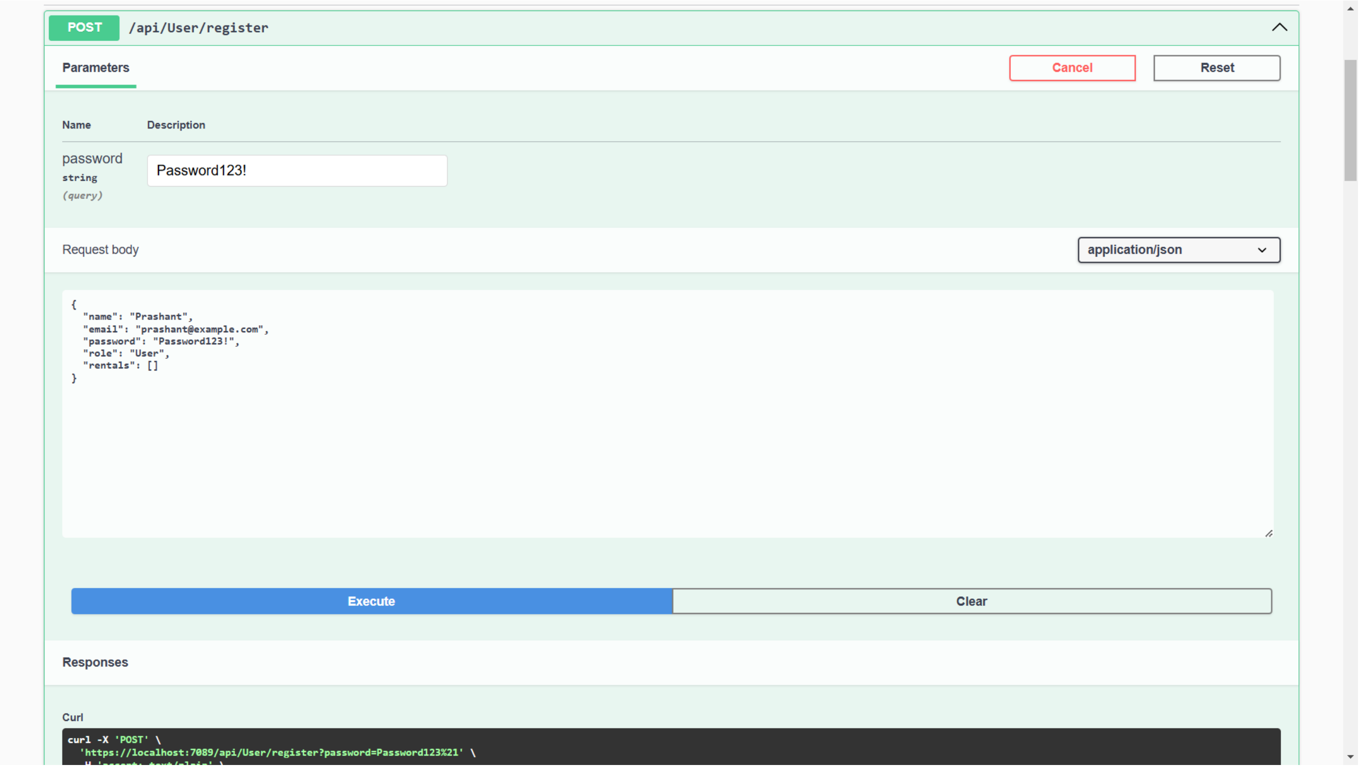
```
{
  "id": 2,
  "name": "Admin",
  "email": "admin@example.com",
  "password": "oQnjaUetVt4dyhzEnw74rJrZp7GqDfQfs8TLc8H/Aeo=",
  "role": "Admin",
  "rentals": []
}
```

SSMS:



	Id	Name	Email	Password	Role
1	1	Prashant	piru7399@gmail.com	oQnjaUetVt4dyhzEnw74rJrZp7GqDfQfs8TLc8H/Aeo=	User
2	2	Admin	admin@example.com	oQnjaUetVt4dyhzEnw74rJrZp7GqDfQfs8TLc8H/Aeo=	Admin

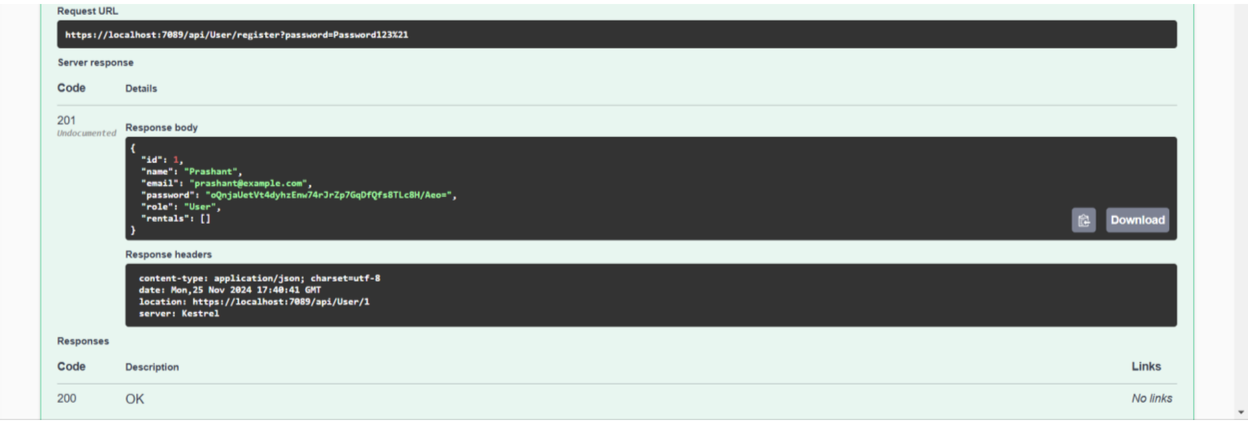
```
Qu... | DESKTOP-LAI8BHP\SQLEXPRESS ... | DESKTOP-LAI8BHP\asus (52) | rentaldb | 00:00:00 | 2 rows
```



password
string
(query)
Password123!

```
{
  "name": "Prashant",
  "email": "prashant@example.com",
  "password": "Password123!",
  "role": "User",
  "rentals": []
}
```

```
curl -X 'POST' \
  'https://localhost:7089/api/User/register?password=Password123%21' \
```



Request URL

```
https://localhost:7089/api/User/register?password=Password123%21
```

Server response

Code	Details
201 *Undocumented*	Response body

```
{
  "id": 1,
  "name": "Prashant",
  "email": "prashant@example.com",
  "password": "oQnjaUetVt4dyhzEmw74rJrZp7GqDfQfs8TLc8H/Aeo=",
  "role": "User",
  "rentals": []
}
```

Response headers

```
content-type: application/json; charset=utf-8
date: Mon,25 Nov 2024 17:40:41 GMT
location: https://localhost:7089/api/User/1
server: Kestrel
```

Responses

Code	Description	Links
200	OK	*No links*

---

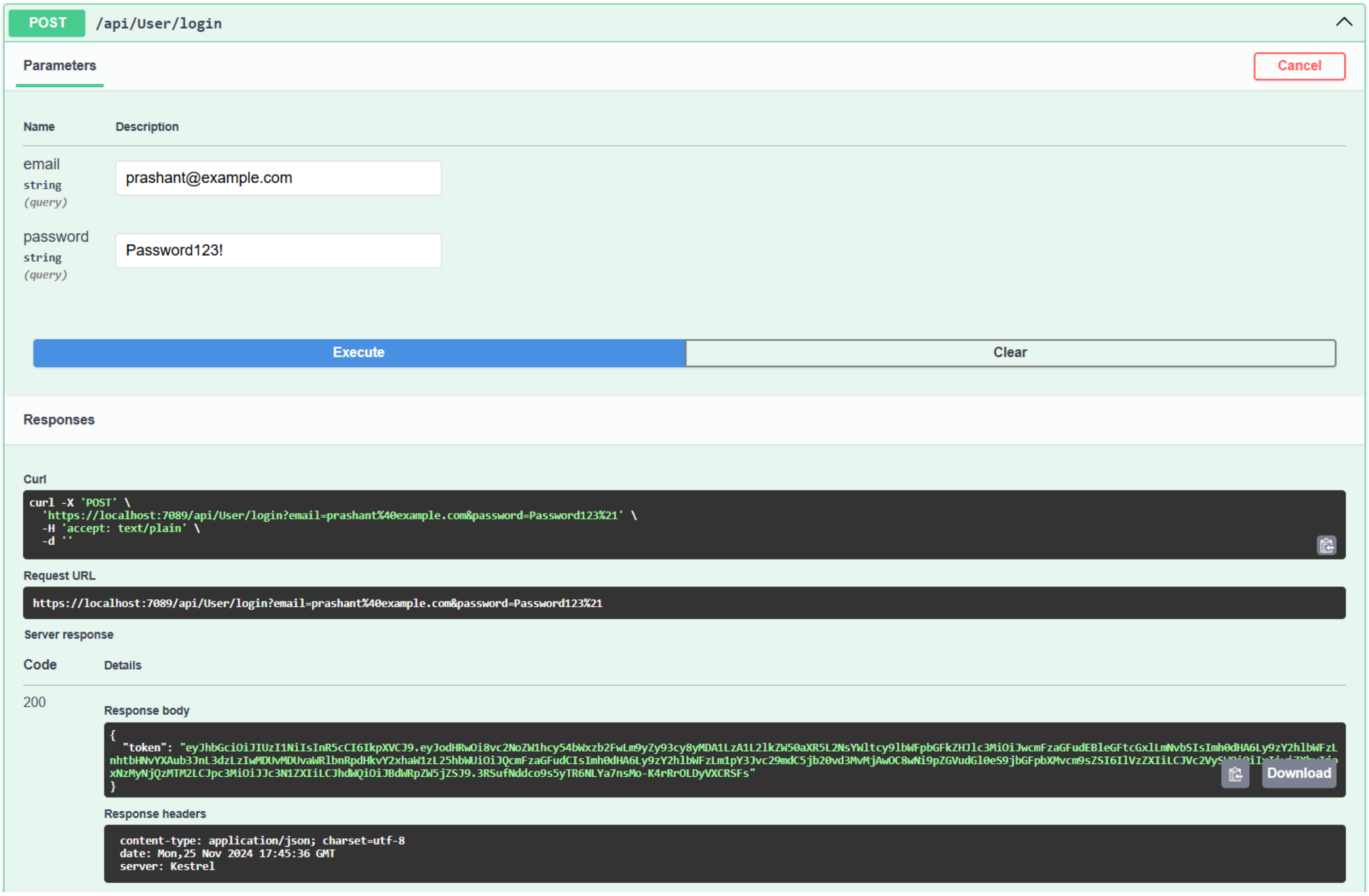
2. POST /api/user/login

- **Purpose**: Log in a user.
- **Input**:

```
{
  "email": "piru7399@gmail.com",
  "password": "Password123!"
}
```

- **Output**:

```
{
  "token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJodHRwOi8vc2NoZW1hcy54bWxzb2FwLm9yZy93cy8yMDA1LzA1L2lkZW50aXR5L2NsYWltcy9lbWFpbGFkZHJlc3MiOiJwcmFzaGFudEBleGFtcGxlLmNvbSIsImh0dHA6Ly9zY2hlbWFzLnhtbHNvYXAub3JnL3dzLzIwMDUvMDUvaWRlbnRpdHkvY2xhaW1zL25hbWUiOiJQcmFzaGFudCIsImh0dHA6Ly9zY2hlbWFzLm1pY3Jvc29mdC5jb20vd3MvMjAwOC8wNi9pZGVudGl0eS9jbGFpbXMvcm9sZSI6IlVzZXIiLCJVc2VySWQiOiIxIiwiZXhwIjoxNzMyNjQ2MDcyLCJpc3MiOiJJc3N1ZXIiLCJhdWQiOiJBdWRpZW5jZSJ9.t7AAugVFJC6v7y_D_7xJLoAxid3wrN7rDPstZEBq1Js"
}
```



Name	Description
email string *(query)*	prashant@example.com
password string *(query)*	Password123!

Curl

```
curl -X 'POST' \
  'https://localhost:7089/api/User/login?email=prashant%40example.com&password=Password123%21' \
  -H 'accept: text/plain' \
  -d ''
```

Request URL

```
https://localhost:7089/api/User/login?email=prashant%40example.com&password=Password123%21
```

Server response

Code	Details
200	Response body

```
{
  "token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJodHRwOi8vc2NoZW1hcy54bWxzb2FwLm9yZy93cy8yMDA1LzA1L2lkZW50aXR5L2NsYWltcy9lbWFpbGFkZHJlc3MiOiJwcmFzaGFudEBleGFtcGxlLmNvbSIsImh0dHA6Ly9zY2hlbWFzL
nhtbHNvYXAub3JnL3dzLzIwMDUvMDUvaWRlbnRpdHkvY2xhaW1zL25hbWUiOiJQcmFzaGFudCIsImh0dHA6Ly9zY2hlbWFzLm1pY3Jvc29mdC5jb20vd3MvMjAwOC8wNi9pZGVudGl0eS9jbGFpbXMvcm9sZSI6IlVzZXIiLCJVc2VySWQiOiIxIiwiZXhwIjo
xNzMyNjQzMTM2LCJpc3MiOiJJc3N1ZXIiLCJhdWQiOiJBdWRpZW5jZSJ9.3RSufNddco9s5yTR6NLYa7nsMo-K4rRrOLDyVXCRSFs"
}
```

Response headers

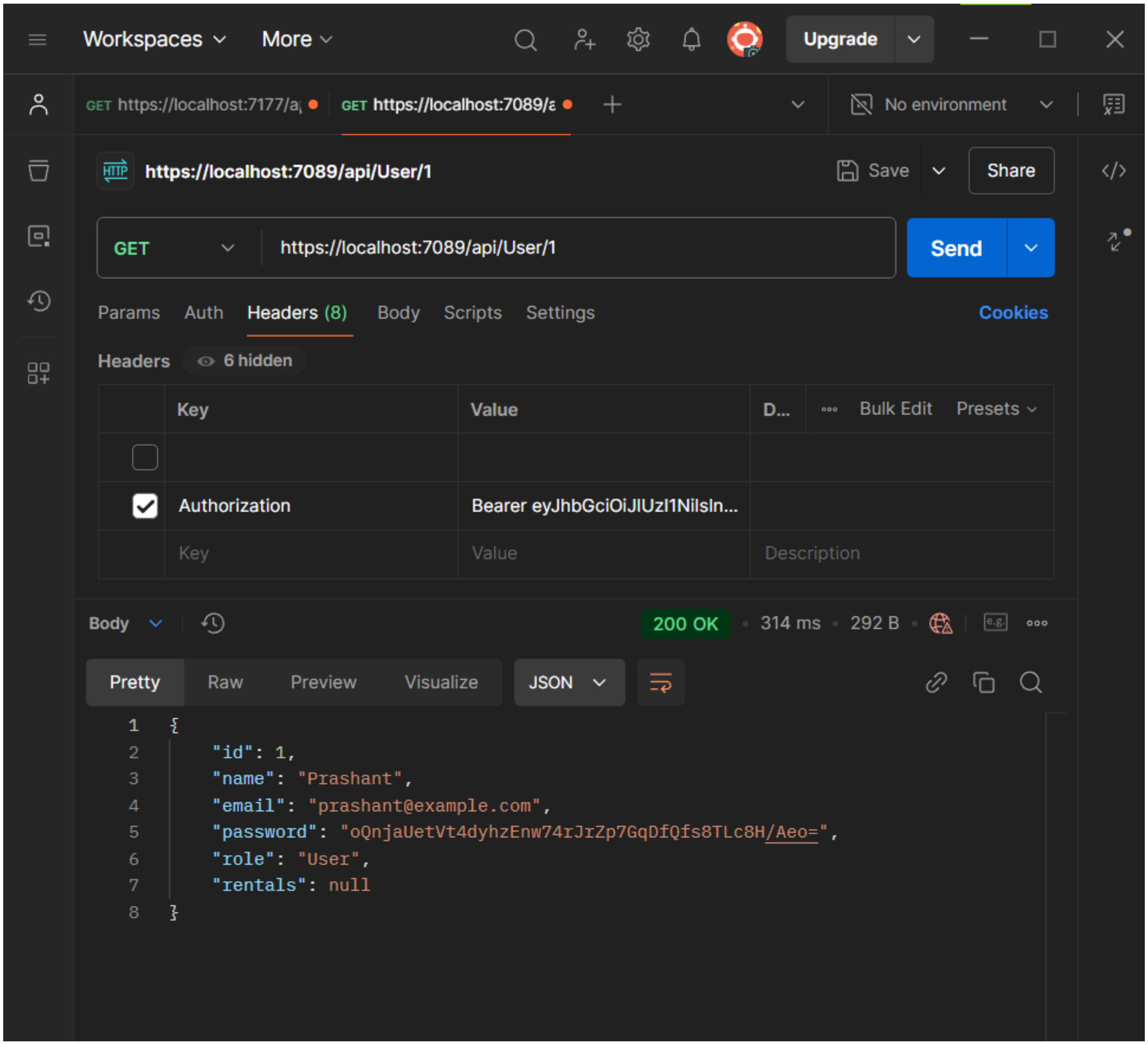
```
 content-type: application/json; charset=utf-8
 date: Mon,25 Nov 2024 17:45:36 GMT
 server: Kestrel
```

---

3. GET /api/user/{id}

- **Purpose**: Get user details by ID.
- **Sample Input**: GET /api/user/1
- **Output(Using generated token as header in Postman)**:

```
{
    "id": 1,
    "name": "Prashant",
    "email": "prashant@example.com",
    "password": "oQnjaUetVt4dyhzEnw74rJrZp7GqDfQfs8TLc8H/Aeo=",
    "role": "User",
    "rentals": null
}
```



https://localhost:7089/api/User/1

GET https://localhost:7089/api/User/1

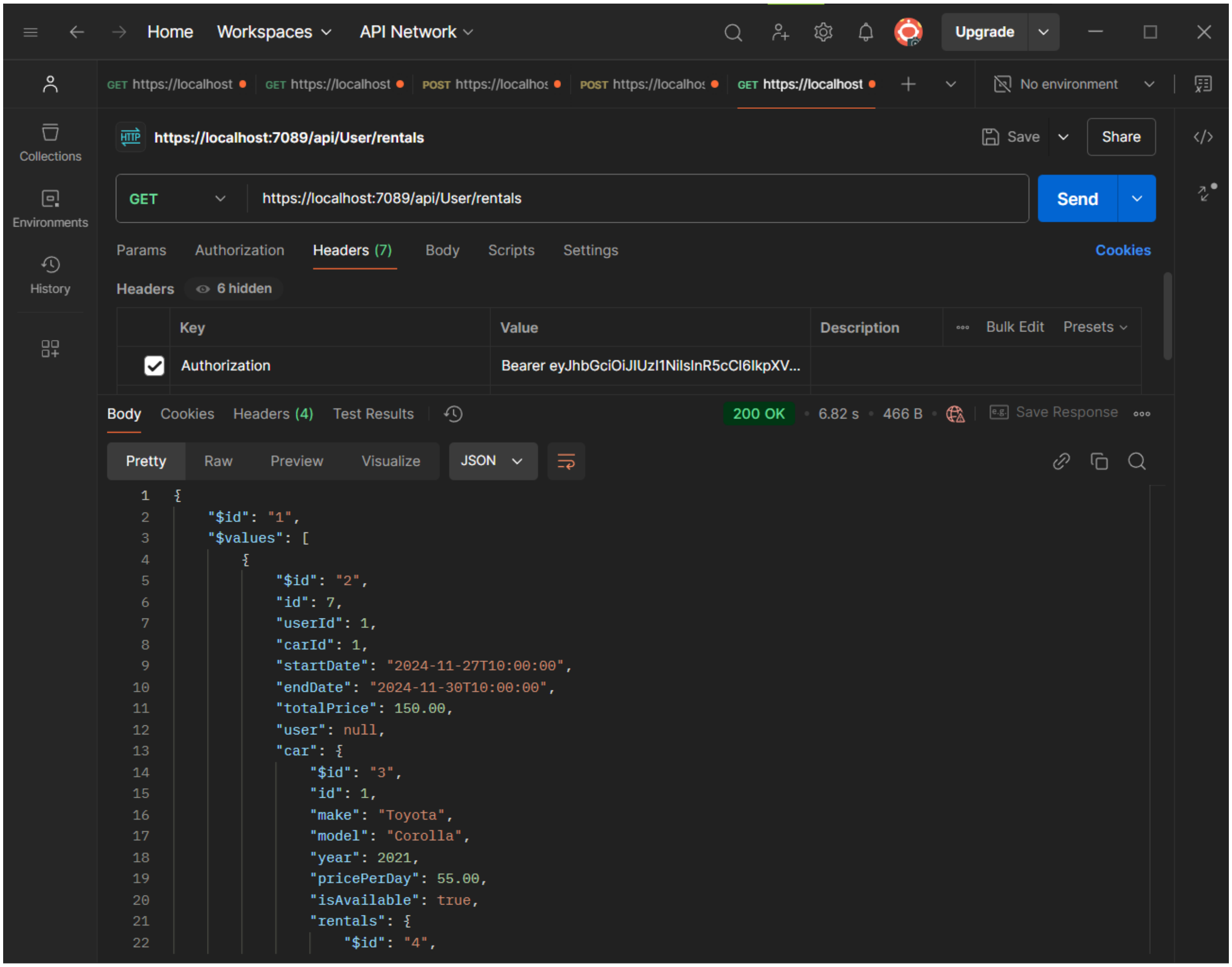
	Key	Value	D...
□			
☑	Authorization	Bearer eyJhbGciOiJIUzI1NiIsIn...	
	Key	Value	Description

200 OK • 314 ms • 292 B

```
{
    "id": 1,
    "name": "Prashant",
    "email": "prashant@example.com",
    "password": "oQnjaUetVt4dyhzEnw74rJrZp7GqDfQfs8TLc8H/Aeo=",
    "role": "User",
    "rentals": null
}
```

4. GET /api/user/rentals

- **Purpose**: Get all rentals for the logged-in user.
- **Input**: No input required (using JWT token for user identification).
- **Output** for https://localhost:7089/api/User/rentals



https://localhost:7089/api/User/rentals

GET https://localhost:7089/api/User/rentals

	Key	Value	Description
☑	Authorization	Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXV...	

200 OK • 6.82 s • 466 B

```
{
    "$id": "1",
    "$values": [
        {
            "$id": "2",
            "id": 7,
            "userId": 1,
            "carId": 1,
            "startDate": "2024-11-27T10:00:00",
            "endDate": "2024-11-30T10:00:00",
            "totalPrice": 150.00,
            "user": null,
            "car": {
                "$id": "3",
                "id": 1,
                "make": "Toyota",
                "model": "Corolla",
                "year": 2021,
                "pricePerDay": 55.00,
                "isAvailable": true,
                "rentals": {
                    "$id": "4",
```